

**Notice of Allowability**

Application No.

10/650,041

Applicant(s)

JALAN ET AL.

Examiner

Art Unit

CHAMELI C. DAS

2192

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/28/03.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                               |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>4/10/06</u> |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>4/4/06</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                       |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                             | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                      |
|  | 9. <input type="checkbox"/> Other _____   |

1. Claims 1-25 have been allowed.
2. The drawings filed on 5/4/04 have been accepted by the Examiner.
3. The IDS filed on 4/4/06 has been considered by the Examiner.

***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119 (a)-(d) which papers have been placed of record in file.

**EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. David Devernoe, applicant's attorney on 4/10/06.

The application has been amended as follows:

***In Claims:***

***Claim 2 (Currently Amended)***

- at line 2, before "event" delete [the] and insert an

***Claim 3 (Currently Amended)***

- at line 2, before "previous" delete [the] and insert a
- at line 2, before "parallel" delete [the] and insert a

***Claim 7 (Currently Amended)***

- at line 3, before “target” delete [the] and insert a
- at line 4, before “programmer” delete [the] and insert a

***Claim 9 (Currently Amended)***

- at line 3, before “job” delete [the] and insert a
- at line 4, before “type” delete [the] and insert a

***Claim 20 (Currently Amended)***

- at line 7, before “type” delete [the] and insert a

***Claim 24 (Currently Amended)***

- at line 9, before “program” delete [the] and insert a

***Claim 25 (Currently Amended)***

- at line 2, at the end of the line, delete [the] and insert an

***REASON FOR ALLOWANCE***

7. The following is an examiner's statement of reason for allowance:

The cited prior art taken alone or in combination fail to teach in combination with the other claimed limitations, a method for executing a sequential program in parallel on a system containing a plurality of processing nodes connected through an interconnection network, comprising the steps of: creating and forwarding synchronous objects as arguments to each job, wherein said synchronous objects enable blocking of a master process only when the object is being accessed by a slave process and allow access by the master process at intermediate points of execution when the object is not

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being accessed by the slave process; and scheduling the job along with values of said arguments on a processing node and executing said job as a slave process on the processing node, as recited in the independent claims 1, 22, and 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

8. The prior art made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Processor cluster architecture and associated parallel processing methods, US 6959372 B1

TITLE: Parallel processor system for processing natural concurrencies and method therefor, US 5021945 A

TITLE: Computer operating process allocating tasks between first and second processors at run time based upon current processor load, US 6298370 B1

TITLE: Object-oriented operating system, US 6684261 B1

TITLE: Dynamic determination of execution sequence, US 6505228 B1

TITLE: Persistent storage of information objects, US 6769124 B1

TITLE: Component extensible parallel execution of multiple threads assembled from program components specified with partial inter-component sequence information, US 6205465 B1

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TITLE: Hashing objects into multiple directories for better concurrency and manageability, US 7007024 B2.

TITLE: Task concurrency management methodology to schedule the MPEG4 IM1 player on a highly parallel processor platform, author: Wong et al, ACM, 2001.

TITLE: ADA for closely coupled multiprocessor targets, author: Cholerton, ACM, 1989.

TITLE: Object Distribution in Orca using Compile-Time and Run-Time Techniques, author: Bal et al, ACM, 1993.

TITLE: Low-Cost Task Scheduling for Distributed – Memory Machines, author: Radulescu et al, IEEE, June 2002.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is 571-272-3696.

The examiner can normally be reached on Monday-Friday from 7:00 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Tuan Dam can be reached at 571-272-3695. The fax number for this group is (571) 273-8300.

An inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-2100.

*Chameli C. Das*  
**CHAMELI C. DAS**  
**PRIMARY EXAMINER**

*4/10/06*